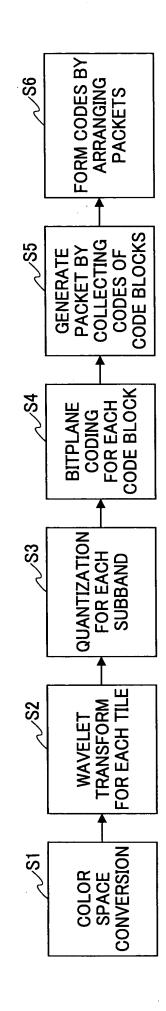
FIG.1A



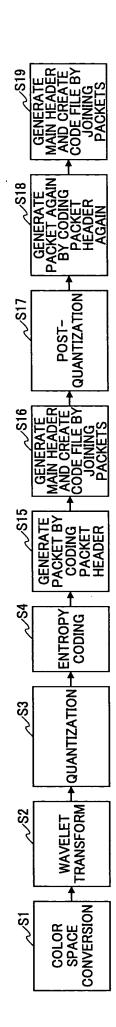
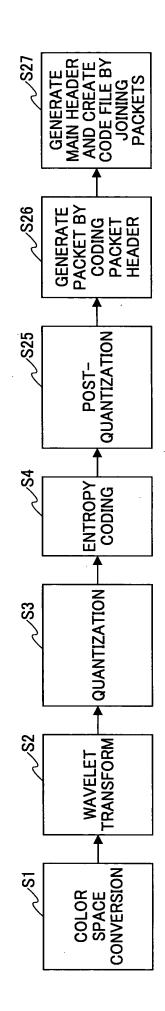


FIG 10



0LL (ORIGINAL IMAGE TILE)

**DECOMPOSITION LEVEL 0** 

1LL	1HL
1LH	1HH

**DECOMPOSITION LEVEL 1** 

FIG.2C

FIG.2D

2LL	2HL	1HL
2LH	2НН	1116
1L	_H	1HH

**DECOMPOSITION LEVEL 2** 

3LL 3H (0) (1 3LH 3H (1) (1	2HL 1 (2)	1HL
2LH (2)	2HH (2)	(3)
	LH (3)	1HH (3)

**DECOMPOSITION LEVEL 3** 

FIG.3

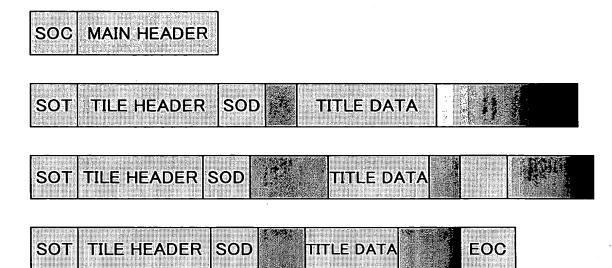


FIG.4

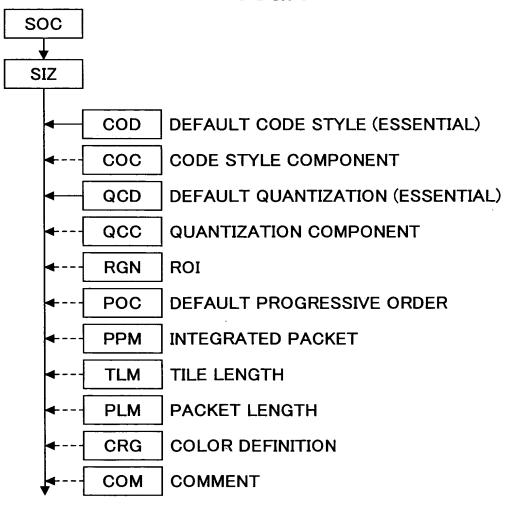
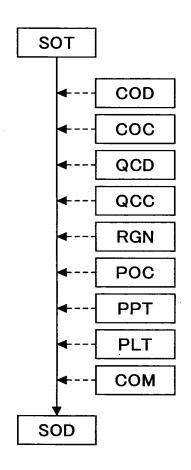
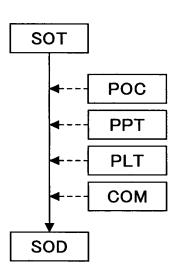


FIG.5A

FIG.5B



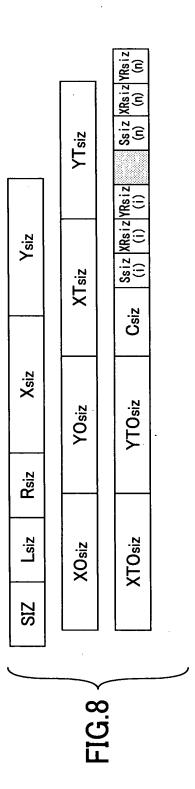


## FIG.6

		NAME	CODE	MAIN HEADER	TILE-PART HEADER
DELIMITING MARKER SEGMENTS	START OF CODESTREAM START OF TILE-PART START OF DATA END OF CODESTREAM	SOC SOT SOD EOC	0xff4f 0xff90 0xff93 0xff49	ESSENTIAL IMPOSSIBLE IMPOSSIBLE IMPOSSIBLE	IMPOSSIBLE ESSENTIAL LAST MARKER IMPOSSIBLE
FIXED INFORMATION MARKER SEGMENTS	IMAGE AND TILE SIZE	SIZ	0xff51	ESSENTIAL	IMPOSSIBLE
FUNCTIONAL MARKER SEGMENTS	CODING STYLE DEFAULT CODING STYLE COMPONENT REGION-OF INTEREST QUANTIZATION DEFAULT QUANTIZATION COMPONENT PROGRESSION ORDER CHANGE	COD COC COC OCD	0xff52 0xff53 0xff5e 0xff5c 0xff5d 0xff5f	ESSENTIAL OPTION OPTION ESSENTIAL OPTION OPTION(*1)	OPTION OPTION OPTION OPTION OPTION
POINTER MARKER SEGMENTS	TILE-PART LENGTH, MAIN HEADER PACKET LENGTH, MAIN HEADER PACKET LENGTH, TILE-PART HEADER PACKED PACKET HEADERS, MAIN HEADER PACKED PACKET HEADERS, TILE-PART HEADER	TLM PLM PPM PPT	0xff55 0xff57 0xff58 0xff60 0xff61	OPTION OPTION IMPOSSIBLE OPTION <sup>(*2)</sup> IMPOSSIBLE	IMPOSSIBLE IMPOSSIBLE OPTION IMPOSSIBLE OPTION(*2)
IN BIT STREAM MARKER SEGMENTS	START OF PACKET END OF PACKET HEADER	SOP EPH	0xff91 0xff92	IMPOSSIBLE	OPTION
INFORMATION MARKER SEGMENTS	COMPONENT REGISTRATION COMMENT	CRG	0xff63 0xff64	OPTION	OPTION

FIG.7

SOT	Lsot	Isot	Psot	TPsot	TNsot
	·			1	



E. C. 3

SPcod	
SGcod	
Scod	
Lcod	
COD	

FIG.10

coc	Lcoc	Ссос	Scoc	SPcoc
-----	------	------	------	-------

FIG.11

	SPqcd (n)
--	--------------

FIG.12

QCC	Lqcc	Cqcc	Sqcc	SPqcc SPqcc (n)
-----	------	------	------	-----------------

FIG.13

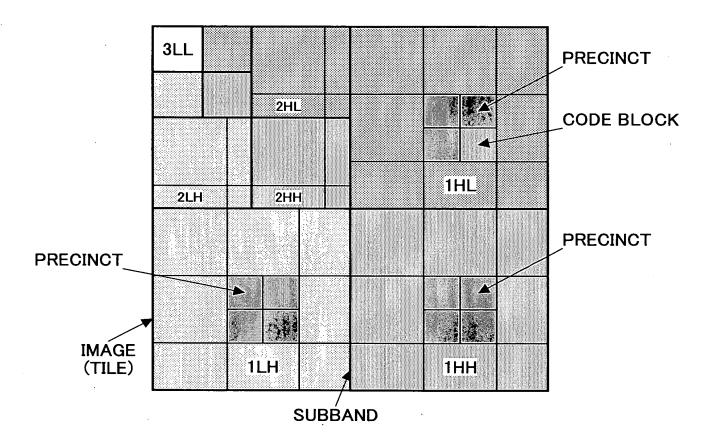


FIG.14

			\ /~~~\	· /	``
PACKET 5  LAYER 0  RESOLUTION LEVEL 1  COMPONENT 2  PRECINCT 0	PACKET 9PACKET 10PACKET 11ILAYER:0LAYER:0***RESOLUTION LEVEL:2RESOLUTION LEVEL:2COMPONENT 1COMPONENT 0COMPONENT 1COMPONENT 1PRECINCT 3PRECINCT 0PRECINCT 1	PACKET 17  LAYER® 2 RESOLUTION LEVEL 2 COMPONENT 2 PRECINCT 3	PACKET 23  LAYER 1  RESOLUTION LEVEL*1  COMPONENT 2  PRECINCT 0	PACKET 27 PACKET 28 PACKET 29  LAYER 1 LAYER 1  RESOLUTION LEVEL 2 RESOLUTION LEVEL 2  COMPONENT 0 COMPONENT 1  PRECINCT 3 PRECINCT 0  PRECINCT 1	PACKET 34  LAYER I  LAYER I  LAYER I  LAYER I  LAYER I  COMPOUNTION LEVEL 2  COMPONENT 2  COMPONENT 2  PRECINCT 3  PRECINCT 4
PACKET 4  ILAYER 0  RESOLUTION LEVEL 1  COMPONENT 1  PRECINCT 0	PACKET 10 LAYER 0 RESOLUTION LEVEL 2 COMPONENT 1 PRECINCT 0	PACKET 16 LAYER 0 RESOLUTION LEVEL COMPONENT 2 PRECINCT 2	PACKET 22  LAYER 1  RESOLUTION LEVEL 1  COMPONENT 1  PRECINCT 0	PACKET 28  LAYER 1  RESOLUTION LEVEL 2  COMPONENT 1  PRECINCT 0	PACKET 34 LAYER 1 RESOLUTION LEVEL 2 COMPONENT 2 PRECINCT 3
PACKET 3  LAYER 0  RESOLUTION LEVEL 1  COMPONENT 0  PRECINCT 0	PACKET 9  LAYER 0   RESOLUTION LEVEL 2   COMPONENT 0   PRECINCT 3	PACKET 15   LAYER 0  -2 RESOLUTION LEVEL 2   COMPONENT 2   PRECINCT 1	PACKET 21 LAYER 1 RESOLUTION LEVEL 1 COMPONENT 0 PRECINCT 0		PACKET 33 LAYER 1 RESOLUTION LEVEL COMPONENT 2 PRECINCT 2
PACKET 2  LAYER 0  EL 0 RESOLUTION LEVEL 0  COMPONENT 2  PRECINCT 0	PACKET 8  EL 2 RESOLUTION LEVEL 2  COMPONENT 0  PRECINCT 2	PACKET 14  LAYER 0  RESOLUTION LEVEL COMPONENT 2  PRECINCT 0	PACKET 20 LAYER 1 EL 0 RESOLUTION LEVEL 0 COMPONENT 2 PRECINCT 0	PACKET 26  LAYER 1  EL 2 RESOLUTION LEVEL 2  COMPONENT 0  PRECINCT 2	PACKET 32  LAYER 1  EL 2 RESOLUTION LEVEL 2  COMPONENT 2  PREGINCT 1
300000 50000		NEL NEL			PACKET 31  LAYER 1  2 RESOLUTION LEVEL 2 COMPONENT 1 PRECINCT 3
LAYER 0 PACKET 1  LAYER 0 LAYER 0  RESOLUTION LEVEL 0 RESOLUTION LEVEL 0 COMPONENT 1  COMPONENT 0 COMPONENT 1  PRECINCT 0 PRECINCT 0	PACKET 6 PACKET 7 LAYER 0 RESOLUTION LEVEL 2 RESOLUTION LEV COMPONENT 0 COMPONENT 0 PRECINCT 0	PACKET 12 PACKET 13 LAYER 0. * LAYER 0. RESOLUTION LEVEL 2 RESOLUTION LEV COMPONENT 1 COMPONENT 1 PRECINCT 2 PRECINCT 3	PACKET 18 PACKET 19 LAYER 1 LAYER 1 RESOLUTION LEVEL 0 RESOLUTION LEV COMPONENT 0 COMPONENT 0 PRECINCT 0	PACKET 24 PACKET 25 LAYER 1 LAYER 1 COMPONENT 0 COMPONENT 0 PRECINCT 0 PRECINCT 0	PACKET 30 LAYER 1 RESOLUTION LEVEL COMPONENT 1 PRECINCT 2
Ä					

FIG.15

			<u>/ B</u> \		\		, <u>,</u>	`	, <u>-</u>	`	
PACKET 5	O RESOLUTION LEVEL   RESOLUTION LEVEL   RESOLUTION REVEL   LAYER   LAYER   LAYER   LAYER   COMPONENT 2 COMPONENT 2 COMPONENT   COMPONENT 2 COMPONENT 3 COMPONENT 3 COMPONENT 3 COMPONENT 3 COMPONENT 3 COMPONENT 4 COMPONENT 4 COMPONENT 4 COMPONENT 4 COMPONENT 5 COMPONENT	Thereas Dornach	PRECINCT 0	Parties in Business	PRECINCT 1  PACKET 23	2 RESOLUTION LEVEL 2 RESOLUTION LEVEL 2 RESOLUTION LEVEL 2 RESOLUTION LEVEL 2 LAYER 0 LAYER 0	COMPONENT 2 PRECINCT 3	PACKET 26 PACKET 27 PACKET 28 PACKET 29  2 RESOLUTION LEVEL 2 RESOLUTION RESOLUTION LEVEL 2 RESOLUTION LEVEL 2 RESOLUTION LEVEL	COMPONENT 1 PRECINCT 1	PACKET 32 PACKET 33 PACKET 34 PACKET 35 RESOLUTION LEVEL 2 RESOLUTION LEVEL 2 RESOLUTION LEVEL 2	COMPONENT 2 PRECINCT 4
PACKET 4	COMPONENT 1	Ulimber Hilliagen	COMPONENT 1 PRECINCT 0 PACKET 16	dece Come	PRECINCT 0  PACKET 29	RESOLUTION LEVEL.	COMPONENT 2 PRECINCT 2	PACKET 28 RESOLUTION LEVEL	COMPONENT 1 PRECINCT 0	PACKET 34 RESOLUTION LEVEL	COMPONENT 2 PRECINCT 3
PACKET 3	RESOLUTION LEVEL C LAYER 1 COMPONENT 0 DECINCT 0		COMPONENT 0 PRECINCT 0	ACCOL STREET	PRECINCT 3 PACKET 21	RESOLUTION LEVEL 2	COMPONENT 2 PRECINCT 1	PACKET 27 RESOLUTION LEVEL 2	COMPONENT 0 PRECINCT 3	PACKET 33 RESOLUTION LEVEL 2	LAYER 1 COMPONENT 2 PRECINCT 2
PACKET 2	RESOLUTION LEVEL O LAYER 0 COMPONENT 2 DESCRIPT 0	PACKET 8 RESOLUTION LEVEL 1 LAYER 0	COMPONENT 2 PRECINCT 0 PACKET 14	RESOLUTION LEVEL 2 LAYER 0 COMPONENT 0	PRECINCT 2	RESOLUTION LEVEL 2	COMPONENT 2 PRECINCT 0	PACKET 26 RESOLUTION LEVEL 2	COMPONENT 0 PRECINCT 2	PACKET 32 RESOLUTION LEVEL 2	COMPONENT 2 PRECINCT 1
PACKET 1		N EVEL	COMPONENT 1 PRECINCT 0	2	PRECINCT 1	RESOLUTION LEVEL 2	COMPONENT 1 PRECINCT 3		COMPONENT 0 PRECINCT 1	- 2	COMPONENT 1
PACKET 0	LAYER 0 COMPONENT 0	NI EVEL 1	COMPONENT 0 PRECINCT 0	IN LEVEL 2	PRECINCT 0	N LEVEL 2	COMPONENT 1 PRECINCT 2	PACKET 24  RESOLUTION LEVEL 2 RESOLUTION LEVEL	VENT 0	PACKET 30 PACKET 31 RESOLUTION LEVEL	COMPONENT 1
RLCP				/	,	ر <i>ا</i>	•	\\	<del>/</del>	``\	ا ا

FIG.16

330 330 330 339 433 483		261 287 287 316 316 347 347 347 420 420
		287 330 316 363 347 399 420 439 ENTROPY CODING BY BIT
ES AFTER	227 249 302 365 365 AMOUNT	

FIG.17

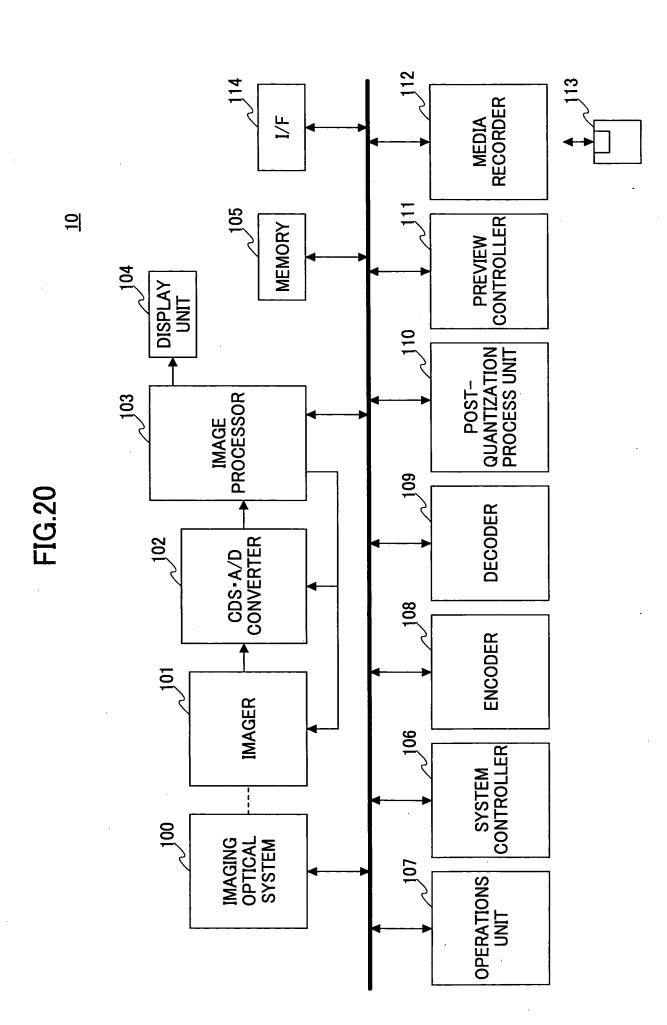
王	18 19 20 21 22			53	09	54	57	0.7	73	76	67	08	8	83	83			
11.	12 13 14 15 16 17			34	44	48	52	26	20	63	99	69	72	75	78			
	7 8 9 10 11 1																	
111	2 3 4 5 6			33	43	47	21	22	28		69	89	11	74	7.7		UBBAND	
2НН	8 9 10 11 0 1			. 50	25	30	37	42	45	46	49	20	54	57	19		BITPLANES FOR EACH SUBBAND	
2LH	6 7			C	6	13	17	22	24	27	29	32	36	39	41		-Β	
2HL	3 0 1 2			4	8	12	16	3 21	23	0 26	1 28	31	5 35	88	9 40		HIERARCHY OF CODES	
SUBBAND 2LL	0	BINARY NUMBER OF	MSB	CODE OF 12TH 0	CODE OF 11TH 1	CODE OF 10TH 2	CODE OF 9TH 3	CODE OF 8TH 6	CODE OF 7TH 7	CODE OF 6TH 10	CODE OF 5TH 11	CODE OF 4TH 14	CODE OF 3RD 15	CODE OF 2ND 18	CODE OF 1ST 19	LSB		

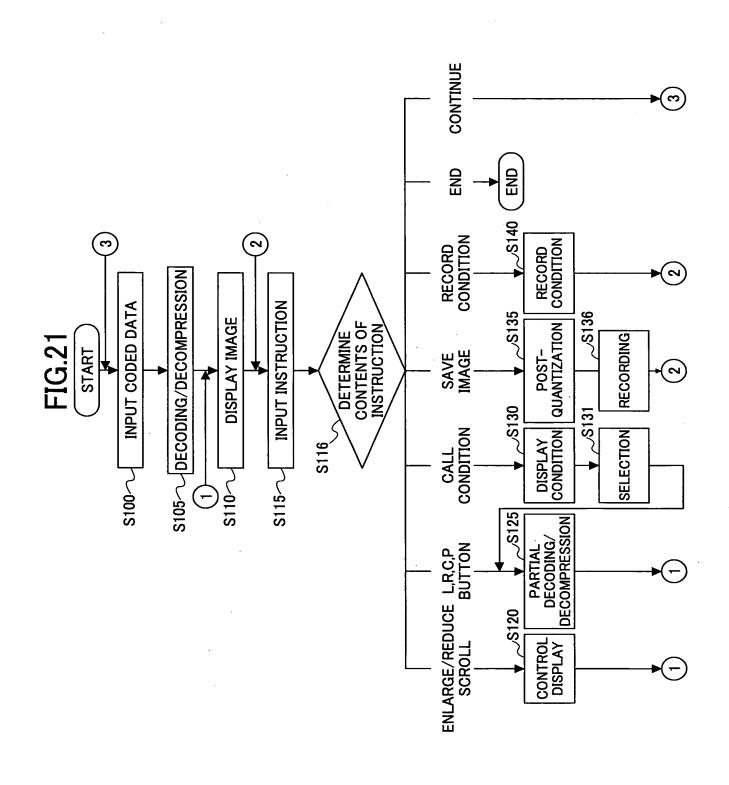
FIG.18

	NO.			≣		**		H					T	ES	ES				-								
	COLORATION													FOTAL AMOUNT OF CODES: 26553BYTES	REFERENCE AMOUNT OF CODES FOR 1 LAYER: 2655BYTES			14	26	37	47	54	62	70	76	18	83
		0 -	2	3	4	5	9	<u>,</u>	::: ∞	6				S : 26!	ER: 20	YER											
	LAYER No.		-			H	Ш							CODE	¥ F	NI.	YER 1	0 2713	1 2912	2 2771	3 2769	4 2895	5 2799	6 2999	7 2836	8 2731	9 1328
		244												N OF	S FOR	GREATEST HIERARCHY NO. IN LAYER	ACTUAL AMOUNT OF CODES PER LAYER	LAYER 0	LAYER 1	LAYER 2	LAYER 3	LAYER 4	AYER 5	LAYER 6	LAYER 7	LAYER 8	LAYER 9
			2	4	_	393		2		2		, rc		AMOL	CODE	 ERARC	DES P		_	_	_	_	_		_		_
		244 ***268	295	324	357	66 	432	475	∴ 523	.:. 575	633	695		OTAL	NT OF	STH	OF CO										
			1												AMOU	 REATE	DUNT										
					:::				:::					<u> </u>	ENCE	9	AL AM										
											++			<u> </u>	REFER		ACTU/										
		3	∭	270	297	327	_	9	LC O	Ш	-	<b>⊢</b> ·			_	 	•										
		203	₩ # #	2 	29	32	360	396	435		597	2 85															
													-														
							Ħ							BAND													
										+				HIERARCHY BY BITPLANES FOR EACH SUBBAND													
		203	246	270	297	327	360	396	435	# 6	<u></u>	580		R EAC													
		2	2		2	e H	ë **	e e	4	<b>⊞</b> 479⊟	597	2		ES FO		 											
-													1	PLAN		 											
						: <b>::</b> 				Ш	E			BY BIT													
		111111 15 15 18	205	225	248	<b>273</b>		 88 	38	399	130	483		RCHY													
					Ш		Щ	Ш	Щ	Ш				HIERA													
		147	178	196	至16	237	261	287	316	347	200	420		NO Q													
				7777										BAS													
		147	178	196	216 	37 ∭	<u>~</u>	287	316	347	100	420		LAYERS GENERATED BASED ON													
					III		IÌ							GENE													
		///// 8	2							M				AYERS		 											
		128	12	07.1	<u> </u>	70 	75 	77	72					2										ļ			
	MSB	31	## #	<b>///</b>	<i>Ш</i>	<b>31</b> 1	<u>///</u>	311	311	Щ	Ш <u>‡</u>		LSB	<u> </u>													
MBER	Σ	12TH E 11TH E	10TH E	9TH E	8TH E	THE	6THE	5TH E	4TH E	3RD E	3 UNC	1ST F	ĭ														
BINARY NUMBER OF COEFFICIENT		CODE OF 12TH BIT	CODE OF 10TH BIT	CODE OF 9TH BIT	CODE OF 8TH BIT	соре оғ 7тн віт	CODE OF 6TH BIT	CODE OF 5TH BIT	CODE OF 4TH BIT	CODE OF 3RD BIT	TIE OF SND BIT	CODE OF 1ST BIT															
BINA OF C		3 8	8	8	႘	ន	8	8	8	8	S	3 8															

FIG.19

				***************************************											COLORATION						4.4.4.4.4.4.4.4.4.4					,	
															YER NO.	0	-	2	3	4 %	9	7	8	6			
	26														2	14	*		I					: ‡			$\coprod$
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ŀ	3 24	-													_			-	<u>-</u>	-#	$\ $	:::::	<u> </u>			<b>-</b>	$\dashv \dashv$
王	2 2	$\vdash$											-			4	3	20	20	± 22	H .	····	9	· · · E	82 g	<u></u>	$\dashv \dashv$
키	11 2	S														ΠĖ	Ī	2	7	7	- 7 - 1	26	26	∴ 26	2 0	<b></b>	++
ł	20 2	A					2						+					+	+	-#			<del> </del>				$\dagger \dagger$
	18 19 20 21 22 23	EMPTY PACKET					Ä					<del>-</del>				Ш			7	甘	23						$\dagger \dagger$
	18	E					PAC					l				Ш		Ť	Ť	Ħ	Ħ						$\prod$
1	17	Ψ̈́					AL.											$\prod$				c				:	Ш
	16						ET.					[				∷		Щ[				4 F		$\blacksquare$		_	$\prod$
	4 15						←VIRTUAL PACKET NO									<b>.</b>						VIRTUAL PACKET NO		$\parallel$		:}-	$\dashv$
3	13 14	-	2 E	ъ П	<b></b>		4-	7	-	က	9	6				8	▋	Щ	4 		0	20 VI	20	<u>۳</u>	₩:	-	++
=	12 1		.,	٠.,		=	-	17	8	23	78	29					Ξ	7	-	17	2	7	Ñ		123	1	卄
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-	2												1										T			1	OF BITPLANES OF EACH SUBBAND
	6											1	T										T	oxplus			188
	8																		$\prod$								<u>ા</u>
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	8														<u> </u>	Щ	Щ	<u>.</u>	mi	░	ЩЩ	ЩЩ	Щ	Щ	<u> :::</u>	<b>-</b>	-3
	6 7			4	7	2	13	9-	19 E	22 E	.5 E	ω ш			$\vdash$			i			ļ	<u> </u>	-		0	5	- 2
2LH	5									2	25	28					<i></i>	_ 	Ш	111111 4 4			1		2 5	-	TS
	4						<u> </u>												₩				#	<del>                                     </del>	Ŧ	-	공
	က																		$\parallel \parallel$		III		#				VIRTUAL NO. OF PACKETS
ᅱ	2															-	-	-	4	4 <	4	^	_	7	10	2	ြင်
2HL	L						<u> </u>												Щ	ЩЩ	ЩД		1				9
	0	Щ					<u> </u>	<u> </u>							<u> </u>				∭	∭	Щ	,,,,,	m	1111	H	<b>#</b> _	-M
	65				ш	ш	м ш	ъ П	ж	—	<u>4</u> П	7 E	<del>-  </del>											ЩЩ	Щ	4	- <b>E</b>
2LL	1 2		0	E	9	6	12	15	8	21	24	27		•	-	0	0		o ///					<b>IIII</b>		7	-
	-					<u></u>	<u> </u>	<u></u>																₩		-	+ +
9			;; <b>o</b>	ö =	2.0	 0	0.4		9	o -	.: <b>8</b>	:: <b>6</b>		••••	Ж		L				<i>////</i>		E		ᄪ	2 2 m	ᆲᅥ
SUBBAND	CODE BLOCK NO.		VIRTUAL PACKET NO.: LAYER 0	VIRTUAL PACKET NO.: LAYER 1	VIRTUAL PACKET NO.: LAYER 2	VIRTUAL PACKET NO.: LAYER 3	VIRTUAL PACKET NO: LAYER 4	VIRTUAL PACKET NO.: LAYER 5	VIRTUAL PACKET NO.: LAYER 6	VIRTUAL PACKET NO.: LAYER 7	VIRTUAL PACKET NO.: LAYER 8	VIRTUAL PACKET NO.: LAYER 9	_	. ,	MSB	CODE OF 12TH BIT	CODE OF 11TH BIT	CODE OF 10TH BIT	CODE OF 9TH BIT	CODE OF 8TH BIT	CODE OF 6TH BIT	CODE OF 5TH BIT	CODE OF 4TH BIT	CODE OF 3RD BIT	CODE OF 2ND BIT	-	
SUB	3		뿛Δ	뿛Δ	뿛Δ	뿛Δ	뿛조	发고	发조	뽔조	뿛조	뽔즈	RFR			121	Ξ	5	F 9	F 8	F 61	F 51	F 41	F 3F	F 24	<u>"</u>	
	E B		ΡĄ	Α	PA	PA	PA	PA	PA	PA	PA	PA	Z	<u> </u>		유	ᆼ	占	E 0	0 1	E C	E 0	E 0	E 0		D L	
	8		¥	¥	¥	Ψ	¥	¥	¥	¥	¥	Æ	N ≥	EE		증	SE	ਲ	8	8		Ő	Q	Ö	8	5	
			IRI	IFI	E	E	F	E	IRT	IRT	F	IRT	RINARY NIMBER	OF COEFFICIENT		ಠ	ಠ	ಠ	٦	٦	10	٥	3	٥	٥		
			5	5	>	>	>	5	5	5	5	5	ă	0		L			l	l_		<u>L</u>		$\coprod$			





## FIG.22A



FIG.22B





FIG.23A

0	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19
20	21	22	23	24

FIG.23B

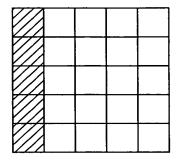


FIG.23C

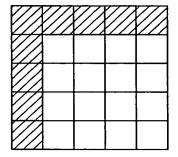


FIG.23D

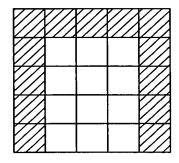
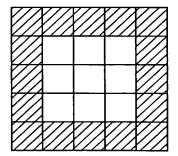
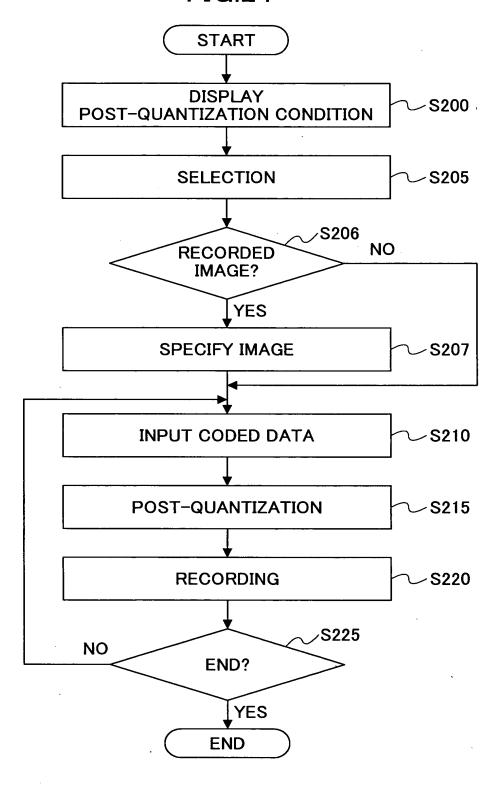


FIG.23E



**FIG.24** 



**FIG.25** 

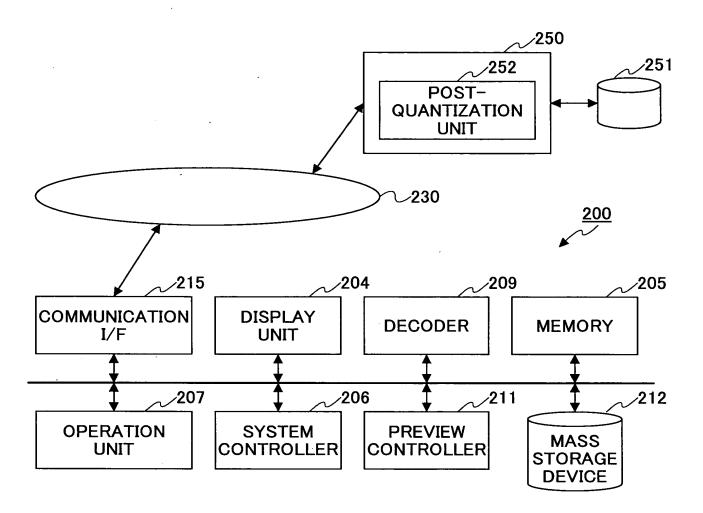


FIG.26

